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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/627,900

07/25/2003

Mark A. Shelly

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06/01/2005

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EXAMINER

ELDRED, JOHN W

ART UNIT

PAPER NUMBER

3644

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/627,900	Applicant(s) SHELLY, MARK A.	
	Examiner J. Woodrow Eldred	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-13, 16-23, 26-32, 34 and 35 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 14, 15, 24, 25 and 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3-14-05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 4, 7, 9, 10, 12, 13, 16, 18-20, 22, 23, 26, 28-31, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Von Thal et al (6,651,933) in view of either UK 2,353,082 or Ruiz (6,079,135).

Von Thal et al disclose a conduit for aircraft refueling comprising all claimed elements including inherently pumping fuel through the conduit from a tank on the refueling aircraft to an aircraft being refueled, and a plurality of reflective element disposed in an annular band around a wall of the conduit. See especially Figures 2A and 2B, and reflective elements 32, 33, and 30. Von Thal et al fail to show the reflective elements disposed in a "substantially continuous annular band" about the wall of the conduit. UK 2,353,082 and Ruiz each teach that it is well known to employ a continuous band of reflective or illuminated material around a fluid conduit in order to improve visibility. See the Abstract of each. Motivation to combine is the mere inclusion of more material to complete a continuous band around the conduit in order to provide even greater visibility to the conduit and to the particular position of the reflective material. To employ the teachings of either UK 2,353,082 or Ruiz on the conduit of Von Thal et al and have a continuous band of reflective material is considered to have been obvious to one having ordinary skill in the art.

3. Claims 2, 11, 21, and 32 rejected under 35 U.S.C. 103(a) as being unpatentable over von Thal et al and either UK 2,353,082 or Ruiz as applied above to claims 1, 3, 4, 7, 9, 10, 12, 13, 16, 18-20, 22, 23, 26, 28-31, 34, and 35 and further in view of Stump et al (5,835,271).

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Von Thal et al disclose a conduit for aircraft refueling comprising all claimed elements including reflectors placed upon the conduit. Von Thal et al fail to show the reflectors comprising glass beads. Stump et al teach that it is known to make reflectors with glass beads and place that reflector upon a surface. See especially column 5, lines 39-50.

Motivation to combine is the mere substitution of a particular reflective means for an unspecified one. To employ the teachings of Stump et al, and UK 2,353,082 or Ruiz, on the conduit of von Thal et al and have the reflectors include glass beads is considered to have been obvious to one having ordinary skill in the art.

4. Claims 8, 17, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over von Thal et al and either UK 2,353,082 or Ruiz as applied above to claims 1, 3, 4, 7, 9, 10, 12, 13, 16, 18-20, 22, 23, 26, 28-31, 34, and 35 and further in view of Krispin et al (5,326,052).

Von Thal et al is applied as above except it fails to show a hose as the conduit. Krispin et al teach that it is well known to have a hose as the conduit of an aircraft refueling system. Motivation to combine is the mere substitution of a hose for a boom in order to perform the same fuel transfer function. To employ the teachings of Krispin et al, and UK 2,353,082 or Ruiz, on the refueling system of von Thal et al and have a hose as a conduit is considered to have been obvious to one having ordinary skill in the art.

5. Claims 5, 6, 14, 15, 24, 25, and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection. It is noted, however, that the argument concerning the lack of a reflector "formed within an outer layer of the wall" is irrelevant since the claims have an alternative position (i.e. "disposed on an outer surface of the wall member") for the reflectors and this alternative position is taught by the prior art applied to the claims above.

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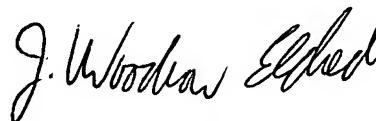
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Woodrow Eldred whose telephone number is 571-273-6901. The examiner can normally be reached on Monday to Thursday, from 8:00 a.m. to 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4177.



J. Woodrow Eldred
Primary Examiner
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